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| APPLICATION NO.            | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|----------------------------|------------------|----------------------|-------------------------|------------------|--|
| 10/066,077                 | 01/31/2002       | Sten Frolich         | ANO 6187 US1/3161CIP    | 4735             |  |
| 759                        | 90 07/02/2003    |                      |                         |                  |  |
| LAINIE E. PARKER           |                  |                      | EXAMINER                |                  |  |
| AKZO NOBEL<br>7 LIVINGSTON | NE AVENUE        |                      | CHIN, PETER             |                  |  |
| DOBBS FERRY                | Y, NY 10522-3408 |                      | ART UNIT                | PAPER NUMBER     |  |
|                            |                  |                      | 1731                    | 7                |  |
|                            |                  |                      | DATE MAILED: 07/02/2003 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   |   | ما س  |  |  |
|---|---|---|---|--|--|
| ا سند ا   |   | Application No.   | Applicant(s)  |  |  |
| Office Action Summary   |   | 10/066,077  | FROLICH ET AL.  |  |  |
|   |   | Examiner  | Art Unit  |  |  |
|   |   | Peter Chin  | 1731  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |   |   |  |  |
| THE M - Extens after S - If the p - If NO p - Failure - Any rep   | RTENED STATUTORY PERIOD FOR REPL AILING DATE OF THIS COMMUNICATION. ions of time may be available under the provisions of 37 CFR 1.1 IX (6) MONTHS from the mailing date of this communication. eriod for reply specified above is less than thirty (30) days, a repleriod for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statute ply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a re<br>y within the statutory minimum of thirty<br>will apply and will expire SIX (6) MON's. cause the application to become AB | eply be timely filed  y (30) days will be considered timely.  THS from the mailing date of this communication.  ANDONED (35 U.S.C. 6 133) |  |  |
| 1)  | Responsive to communication(s) filed on   |   |   |  |  |
| _   |   | is action is non-final.   |   |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims   |   |   |   |  |  |
| 4)⊠ 0   | Claim(s) <u>1-11</u> is/are pending in the application  | l <b>.</b>  |   |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |   |  |  |
| 5) Claim(s) is/are allowed.   |   |   |   |  |  |
| 6)⊠ Claim(s) <u>1-11</u> is/are rejected.   |   |   |   |  |  |
| 7) Claim(s) is/are objected to.   |   |   |   |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.  Application Papers   |   |   |   |  |  |
|   | •   |   |   |  |  |
|   | ne specification is objected to by the Examine  |   |   |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  |   |   |   |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |   |   |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |   |   |   |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |   |   |   |  |  |
| 12) The oath or declaration is objected to by the Examiner.   |   |   |   |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |   |   |   |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |   |   |   |  |  |
| a) ☐ All b) ☐ Some * c) ☒ None of:  |   |   |   |  |  |
| 1. Certified copies of the priority documents have been received.   |   |   |   |  |  |
| 2.  | 2. Certified copies of the priority documents have been received in Application No  |   |   |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |   |   |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |   |   |   |  |  |
| a) [  | ☐ The translation of the foreign language proknowledgment is made of a claim for domesti  | visional application has be   | en received.  |  |  |
| 1) Notice of 2) Notice of 3) Information  | of References Cited (PTO-892)<br>of Draftsperson's Patent Drawing Review (PTO-948)<br>dion Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3.6</u>  | 5) Notice of In   | ummary (PTO-413) Paper No(s)  formal Patent Application (PTO-152)   |  |  |
| S. Patent and Trade<br>TO-326 (Rev. (   |   | on Summary  | Part of Paper No. 7   |  |  |



Application/Control Number: 10/066,077

Art Unit: 1731

## **DETAILED ACTION**

1. Claims 1-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Begala (5,185,062 or 5,595,629).

Begala discloses sizing agents, column 5 and 4 respectively of Begala '062 and '629. Separate addition of cationic polymer and anionic polymer is taught. The addition of anionic polymer containing sulfonate groups having molecular weights as low as 30,000 is disclosed in column 6 of each patent. The cationic polymer has aromatic group such as dimethylaminoethyl benzyl chloride acrylamide quaternary group, which is preferred Note in regard to claim 6 and 7, Begala "062 discloses sulfonated styrene polymer.

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art is cited to show the superior retention/flocculation performance of cationic polymers containing aromatic groups in papermaking: Nagarajan et al (6,007,679) and Maury et al (6,171,505).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Chin whose telephone number is (703) 308-2046. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Peter Chin Primary Examiner Art Unit 1731 Page 3